

Substitute for form 1449/PTO

(Use as many sheets as necessary)

| | |
|------------------------|--------------------|
| Application Number | 10/550,633 |
| Filing Date | 07/12/2006 |
| First Named Inventor | Alan James Coulson |
| Art Unit | n/a |
| Examiner Name | n/a |
| Attorney Docket Number | 0074-524644 |

| | | | |
|-------|---|----|---|
| Sheet | 1 | of | 2 |
|-------|---|----|---|

[illegible]

| FOREIGN PATENT DOCUMENTS | | | | | | |
|--------------------------|-----------------------|---|--------------------------------|---|---|----------------|
| Examiner Initials* | Cite No. ¹ | Foreign Patent Document | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear | T ⁶ |
| | | Country Code ² Number ⁴ Kind Code ⁵ (if known) | | | | |
| /SL/ | | EP 1 263 179 | 12/04/2002 | Ludent Technologies Inc. | | |
| /SL/ | | WO 02/069515 | 09/06/2002 | Magis Networks, Inc. | | |
| /SL/ | | WO 02/23781 | 03/21/2002 | Industrial Research Ltd | | |
| /SL/ | | WO 02/101953 | 12/19/2002 | Broadcom Corporation | | |
| /SL/ | | WO 03/090422 | 10/30/2003 | Conexant Systems, Inc. | | |
| /SL/ | | EP 1 176 731 | 01/30/2002 | Texas Instruments Inc. | | |

| | | | |
|-----------------------|-----------|--------------------|------------|
| Examiner Signature | /Siu Lee/ | Date Considered | 05/18/2009 |
|-----------------------|-----------|--------------------|------------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Complete if Known

(Use as many sheets as necessary)

Sheet

2

of

2

| | |
|--------------------|------------|
| Application Number | 10/550 633 |
|--------------------|------------|

10/550 633

| | |
|-------------|------------|
| Filing Date | 07/12/2006 |
|-------------|------------|

07/12/2006

| | |
|----------------------|--------------------|
| First Named Inventor | Alan James Coulson |
|----------------------|--------------------|

Alan James Coulson

| | |
|----------|-----|
| Art Unit | n/a |
|----------|-----|

| | |
|--|-----|
| | n/a |
|--|-----|

| | |
|---------------|-----|
| Examiner Name | n/a |
|---------------|-----|

n/a

| | |
|------------------------|-------------|
| Attorney Docket Number | 0074-524644 |
|------------------------|-------------|

0074-524644

U. S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

| Examiner Initials* | Cite No. ¹ | Foreign Patent Document | Publication Date | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear | T ⁶ |
|--------------------|-----------------------|---|------------------|---|---|----------------|
| | | Country Code ³ -Number ⁴ -Kind Code ⁵ (if known) | MM-DD-YYYY | | | |
| /SL/ | | EP 1 202 468 | 05/02/2002 | HITACHI KOKUSAI ELECTRI | | |
| /SL/ | | EP 0 721 264 | 07/10/1996 | NTT MOBILE COMMUNICAT | | |
| /SL/ | | WO 99/05815 | 02/04/1999 | GLOBESPAN SEMICONDUCT | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| | | | |
|-----------------------|-----------|--------------------|------------|
| Examiner Signature | /Siu Lee/ | Date Considered | 05/18/2009 |
|-----------------------|-----------|--------------------|------------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND

TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

| | | | | | |
|---|---|-----------------------------|---|-------------------------------|-------------|
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary) | | Application Number | | 10/550,633 | |
| | | Filing Date | | 07/12/2006 | |
| | | First Named Inventor | | Alan James Coulson | |
| | | Art Unit | | n/a | |
| | | Examiner Name | | n/a | |
| Sheet | 1 | of | 2 | Attorney Docket Number | 0074-524644 |

NON PATENT LITERATURE DOCUMENTS

| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
|--------------------|-----------------------|---|----------------|
| /SL/ | | M.G. Amin et al., "Optimum Interference Excision in Spread Spectrum Communications Using Open-Loop Adaptive Filters," IEEE, v. 47, no. 7, 07/1999 | |
| /SL/ | | R. Nilsson et al., "A Narrow-Band Interference Canceller for OFDM-based Systems," 4th Euro. Personal Mobile Com. Conf., 02/2001 | |
| /SL/ | | G.J. Saulnier et al., "Performance of a Spread Spectrum OFDM System in a Dispersive Fading Channel with Interference," IEEE, 1998 | |
| /SL/ | | J.A. Young et al., "Performance Metrics for Windows Used in Real-Time DFT-Based Multiple-Tone Frequency Excision," IEEE, 1999 | |
| /SL/ | | S. Kapoor et al., "Interference Suppression in DMT Receivers Using Windowing," IEEE, 2000 | |
| /SL/ | | L.B. Milstein et al., "An Analysis of a Real-Time Transform Domain Filtering Digital Communication System-Part I: Narrow-Band Interference Rejection," IEEE, 1980 | |
| /SL/ | | S.D. Sandberg, "Adapted Demodulation for Spread-spectrum Receivers which Employ Transform-Domain Interference Excision," IEEE, 1995 | |
| /SL/ | | G. Carron et al., "Comparison of Two Modulation Techniques Using Frequency Domain Processing for In-House Networks," IEEE, 2001 | |
| /SL/ | | K. Witrisal, "Impact of DC-offsets and Carrier Feed-through on Correlation-based Frequency Synchronization for OFDM," 6th Intl. OFDM Workshop, 2001 | |
| /SL/ | | D. Gerakoulis et al., "An Interference Suppressing OFDM System for Wireless Communications," IEEE, 2002 | |

| | | | |
|---------------------------|-----------|------------------------|------------|
| Examiner Signature | /Siu Lee/ | Date Considered | 05/18/2009 |
|---------------------------|-----------|------------------------|------------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

| | | | | | |
|--|---|--------------------------|--------------------|------------------------|-------------|
| Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i> | | Complete if Known | | | |
| | | Application Number | 10/550,633 | | |
| | | Filing Date | 07/12/2006 | | |
| | | First Named Inventor | Alan James Coulson | | |
| | | Art Unit | n/a | | |
| | | Examiner Name | n/a | | |
| Sheet | 2 | of | 2 | Attorney Docket Number | 0074-524644 |

| NON PATENT LITERATURE DOCUMENTS | | | |
|---------------------------------|-----------------------|---|----------------|
| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
| /SL/ | | M. Kuhn et al., "Linear block codes for frequency selective PLC channels with colored noise and multiple narrowband interference," IEEE, 2002 | |
| /SL/ | | R.W. Lowdermilk et al., "Interference Mitigation in Orthogonal Frequency Division Multiplexing (OFDM)," IEEE, 1996 | |
| /SL/ | | J.G. Proakis, "Interference Suppression in Spread Spectrum Systems," IEEE, 1996 | |
| /SL/ | | T.K. Blankenship, "Design and Implementation of a Pilot Signal Scanning Receiver for CDMA Personal Communication Services Systems," May, 1998 | |
| /SL/ | | S.J. Howard, "Narrowband Interference Rejection Using Small FFT Block Sizes," IEEE, 1992 | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

| | | | |
|--------------------|-----------|-----------------|------------|
| Examiner Signature | /Siu Lee/ | Date Considered | 05/18/2009 |
|--------------------|-----------|-----------------|------------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.